

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Customer Number: 53080
: :
Makoto FUJIWARA, et al. : Confirmation Number: 5601
: :
Application No.: 10/696,621 : Group Art Unit: 2436
: :
Filed: October 30, 2003 : Examiner: COLIN, CARL G.
: :
For: PROGRAM UPDATE METHOD AND SERVER

REQUEST FOR REFUND

Mail Stop Refund
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

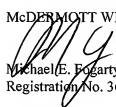
A refund in the amount of \$1300.00 is hereby requested in the above-identified application for the following reason:

The Request for Continued Examination, Petition for Extension of Time, and Amendment filed December 29, 2008 was inadvertently filed twice.

Please immediately credit Deposit Account number 500417 in this amount.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP


Michael E. Fogarty
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Date: January 9, 2009

**Please recognize our Customer No. 53080 as
our correspondence address.**

10/696,621 Program update method and server

12-31-
2008::10:00:36

This application is officially maintained in electronic form. To View: Click the desired Document Description. To Download and Print: Check the desired document(s) and click Start Download.

Available Documents

Mail Room	Date	Document Code	Document Description	Page Count
#1	12-29-2008	RCEX	Request for Continued Examination (RCE)	1
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	12-29-2008	WFEE	Fee Worksheet (PTO-06)	2
	12-29-2008	N417	EFS Acknowledgment Receipt	2
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	12-29-2008	XT/	Extension of Time	1
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	10-28-2008	WFEE	Fee Worksheet (PTO-06)	1
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	07-28-2008	1449	List of References cited by applicant and considered by examiner	1
	06-17-2008	IDS.LET	Information Disclosure Statement Letter	2
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Electronic Acknowledgement Receipt

EFS ID:	4528957
Application Number:	10696621
International Application Number:	
Confirmation Number:	5601
Title of Invention:	Program update method and server
First Named Inventor/Applicant Name:	Makoto Fujiwara
Correspondence Address:	Jack Q. Lever, Jr. McDERMOTT, WILL & EMERY 600 Thirteenth Street, N.W. - Washington DC 20005-3096 US 202-756-8000 -
Filer:	Michael E. Fogarty/Lana Marceron
Filer Authorized By:	Michael E. Fogarty
Attorney Docket Number:	60188-694
Receipt Date:	29-DEC-2008
Filing Date:	30-OCT-2003
Time Stamp:	15:47:48
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1300

RAM confirmation Number	857
Deposit Account	500417
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		060188-0694_RCE_EOT_AMEN DMENT.pdf	349132 4b0e4e16c18b5d470a008ac3beb15d4f6b47a6da	yes	10
Multipart Description/PDF files in .zip description					
	Document Description		Start		End
	Request for Continued Examination (RCE)		1		1
	Extension of Time		2		2
	Amendment Submitted/Entered with Filing of CPA/RCE		3		10

Warnings:

Information:

2	Fee Worksheet (PTO-06)	fee-info.pdf	31597 4b03d59268ac21c98068501843376efcd0907	no	2
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Warnings:

Information:

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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Request for Continued Examination (RCE) Transmittal

Address to:
Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Application Number	10/696,621
Filing Date	October 30, 2003
First Named Inventor	Makoto FUJIWARA, et al.
Art Unit	2436
Examiner Name	COLIN, CARL G.
Attorney Docket Number	060188-0694

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

- Submission required under 37 CFR 1.114.** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).
 - ☐ Previously submitted If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
 - ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
 - ☐ Other _____
 - ☒ Enclosed
 - ☒ Amendment/Reply
 - ☐ Affidavit(s)/Declaration(s)
 - ☐ Information Disclosure Statement (IDS)
 - ☐ Other _____
- Miscellaneous**
 - ☐ Suspension of action of the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
 - ☐ Other _____
- Fees** The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
 - ☒ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 500417. I have enclosed a duplicate copy of this sheet.
 - ☒ RCE fee required under 37 CFR 1.17(e) \$810.00
 - ☒ Extension of time fee (37 CFR 1.136 and 1.17) \$490.00
 - ☐ Other _____
 - ☐ Check in the amount of \$ _____ enclosed
 - ☐ Payment by credit card (Form PTO-2038 enclosed)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Signature	<i>Michael E. Fogarty</i>	Date	December 28, 2008
Name (Print/Type)	Michael E. Fogarty	Registration No.	38,139

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature	Date
Name(Print/Type)	

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Customer Number: 53080
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Makoto FUJIWARA, et al. : Confirmation Number: 5601
: :
Application No.: 10/696,621 : Group Art Unit: 2436
: :
Filed: October 30, 2003 : Examiner: COLIN, CARL G.
: :
For: PROGRAM UPDATE METHOD AND SERVER

PETITION FOR EXTENSION OF TIME

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

It is respectfully requested that the time for response to the Office Action dated July 28, 2008, now due to expire October 28, 2008, be extended for two month(s) and set to expire on December 28, 2008 (Sunday).

Please charge the extension fee of \$490.00 to Deposit Account No. 500417. Please charge any additional fees or credit any overpayment to Deposit Account No. 500417.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Dr. K. L. Fogarty Reg. No. 51,321
for Michael E. Fogarty
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600 13th Street, N.W.
Washington, DC 20005-3096
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Facsimile: 202.756.8087
Date: December 29, 2008

WDC99 1666653-1.060188.0694

**Please recognize our Customer No. 53080
as our correspondence address.**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Customer Number: 53080
	:	
Makoto FUJIWARA, et al.	:	Confirmation Number: 5601
	:	
Application No.: 10/696,621	:	Group Art Unit: 2436
	:	
Filed: October 30, 2003	:	Examiner: COLIN, CARL G.
	:	
For: PROGRAM UPDATE METHOD AND SERVER	:	

AMENDMENT

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In response to the Advisory Action dated December 15, 2008 and Office Action dated July 28, 2008, having a three-month shortened statutory period for response set to expire on October 28, 2008, and the Request for Continued Examination (RCE) and petition for a two-month extension of time up to and including December 28, 2008 (Sunday) being filed concurrently herewith, reconsideration of the above-identified application is respectfully requested in view of the following amendments and remarks.

AMENDMENT TO THE CLAIMS

The following claim listing replaces all prior listings and versions of the claims:

LISTING OF CLAIMS

1. (Currently amended) A method for updating a program in a system including an LSI device and an external memory, the method comprising:

a step of transmitting by the system an inherent ID, which is implemented before the program update, of the LSI device and an application ID which is identification information of an update object program to a server;

a step of determining by the server whether or not the update object program may be transmitted based on the transmitted inherent ID and application ID, and transmitting by the server additional information of the update object program if it is determined that the update object program may be transmitted;

a step of determining by the system whether or not program update is possible based on the transmitted additional information, and requesting by the system the server to transmit a common key-encrypted program generated by encryption with a common key if it is determined that program update is possible;

a step of receiving by the system the common key-encrypted program transmitted from the server;

a step of decrypting by the system the received common key-encrypted program to generate a raw program; and

a step of re-encrypting by the system the raw program with an inherent key unique to the LSI device and storing the re-encrypted program in the external memory as a new inherent key-encrypted program.

2. (Previously presented) The program update method of claim 1, further comprising the steps of:

receiving by the system common key information transmitted from the server; and

generating by the system a raw common key using the received common key

information,

wherein at the decrypting step, the raw common key is used to decrypt the common key-encrypted program.

3. (Original) The program update method of claim 2, wherein the common key information includes an encrypted common key generated by encrypting the raw common key with a raw first intermediate key, and an encrypted first intermediate key generated by encrypting the raw first intermediate key with a raw second intermediate key.

4. (Previously presented) The program update method of claim 1, wherein:
the LSI device includes an internal memory in which inherent key information is stored;
the system uses the inherent key information stored in the internal memory to generate a raw inherent key at boot-up of the system; and

at the re-encrypting step, the raw inherent key is used for re-encrypting the raw program.

5. (Original) The program update method of claim 4, wherein the inherent key information includes an encrypted inherent key generated by encrypting the raw inherent key with a raw third intermediate key and an encrypted second intermediate key generated by encrypting the raw third intermediate key with a raw fourth intermediate key.

6. (Original) The program update method of claim 4, wherein the generated raw inherent key is stored in a register of the LSI device and is used for decrypting the inherent key-encrypted program to a raw program for execution of the inherent key-encrypted program.

7. (Original) The program update method of claim 1, wherein:
the LSI device includes a boot ROM in which a boot program is stored;
the external memory includes an acquisition program for establishing data transmission between the LSI device and a server; and

the system executes reception of the common key-encrypted program based on the acquisition program stored in the external memory, and controls update processing performed after the reception of the common key-encrypted program based on the boot program stored in the boot ROM.

8. (Previously presented) The program update method of claim 1, further comprising the step of receiving a HASH value of the raw program transmitted from the server,
wherein at the decrypting step, the received HASH value is used to perform a HASH verification on the decrypted raw program.

9-11. (Cancelled)

REMARKS

Introduction

Claims 1-8 are pending in this application, with claim 1 being independent. Claim 1 has been amended to correct informalities in the claim language and to more clearly define the claimed subject matter. Support for the amendment is found, for example, at page 11, line 21 to page 12, line 8 of the specification and FIG. 5. Specifically, the portion "...With this setting, program installation processing SD1 is not performed any more at the time of boot-up of the secure LSI device 1. At the end of program installation processing SD1, the program common key stored in the secure memory 10 and the program Enc (program, program common key) stored in the external memory 100 are deleted (SD1A and SD1B)" discloses the feature "the inherent ID is implemented before the program update." No new matter has been entered.

For the reasons set forth below, Applicants respectfully submit that all pending claims as amended are patentable over the cited prior art.

Claim Rejections – 35 U.S.C. § 112

Claims 1-8 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner asserts the term "inherent ID," although supported by FIG. 1 of the instant application, is not shown or described to be identical to the LSI device ID.

Applicants respectfully submit that the reference numeral 1 of FIG. 1 of the present application refers to the LSI device, which includes as one of its components an inherent ID set inside the inherent ID storage register included in the private key arithmetic processing section 20 (see, page 6, line 23 to page 7, line 4 of the specification). As such, it is clear that the

inherent ID stored in the register is the ID of the LSI device 1. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 1-8.

Claim Rejections – 35 U.S.C. § 103

Claims 1 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 7,110,984 (“Spagna”) in view of U.S. Patent Number 6,970,565 (“Rindsberg”). Claims 2, 4, 6, and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Spagna in view of Rindsberg, and further in view of U.S. Patent Number 6,577,734 (“Etzel”). Claims 3 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Spagna in view of Rindsberg and Etzel, and further in view of U.S. Patent Application Publication Number 2002/0116632 (“Itoh”). Applicants respectfully traverse these rejections for at least the following reasons.

The Examiner asserts that Spagna discloses a unique Device ID (Identification of the End-User Device), referring to col. 48, lines 16-40 of Spagna. Applicants respectfully submit that the Device ID of Spagna is not used for the identification and the generation of an inherent key. The portion the Examiner cited states “[t]he following information is typically logged by the Clearinghouse(s) 105 for a License SC(s) 660.... Identification of the End-User Device(s) 109” (see, col. 48, lines 16-40) but fails to disclose whether the Identification of End-User Device(s) is in fact used for the identification of the Device and the generation of an inherent key. Similarly, col. 26, lines 36-55 fails to disclose whether the Identification of End-User Device(s) is in fact used for the identification of the Device and the generation of an inherent key.

Further, in Fig. 6 of Spagna, Content ID, Application ID and User Information are included in elements 101, 551 and 660, respectively. The End User Device, which allegedly

corresponds to an LSI device of the present application, is supplied with the Content ID, Application ID and User Information from the outside.

As such, it is clear that, at a minimum, Spagna fails to disclose the above discussed limitations of claim 1. None of the other cited references cure the deficiencies of Spagna. Thus, none of the combinations of the cited references render claim 1 obvious.

Furthermore, under Federal Circuit guidelines, a dependent claim is non-obvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as independent claim 1 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon (claims 2-8) are also patentable.

Conclusion

Having fully responded to all matters raised in the Office Action, Applicants submits that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Ben K. Lind Reg. No. 51,321
s/ Michael E. Fogarty
Registration No. 36,139

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Phone: 202.756.8000 MEF:TS:MaM
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Date: December 29, 2008

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